Transportation Policy Report

STATUS OF REVIEW

September 24, 1999

At its September 16 worksession on the Transportation Policy Report, the Montgomery County Planning Board approved a two-step approach recommended by staff. Using this approach, the Planning Board recommended projects to be added to the State's Consolidated Transportation Program (CTP) and the Metropolitan Washington Council of Government's Constrained Long Range Plan (CLRP), and established a longer-term work program for additional analyses.

Following its review of the Transportation Solutions Group Report, scheduled for its agenda of September 30, the Planning Board will forward a package of related actions to the County Council:

- projects recommended to be included in the Maryland FY 2000-2005 CTP
- projects recommended to be added to the region's CLRP
- draft letter to the Governor regarding the inadequacy of transportation funding
- recommendations regarding the Transportation Solutions Group Report, especially the parkway recommendation

The Transportation and Environment Committee is scheduled to review these items at its meeting of Tuesday, October 12. The full Council anticipates considering them on Tuesday, October 19.

There is an urgent need to complete the CTP and CLRP recommendations since the final recommendations on both documents will be made over the next several months. The Montgomery County Delegation and other elected officials will receive a draft CTP briefing from the Maryland Department of Transportation on Thursday, September 30. A public hearing on state capital projects will be held by the Delegation on November 9, 1999. MWCOG will begin developing the Year 2000 CLRP in November.

The county recommendations regarding these near term programs represent the first phase of the work on the Transportation Policy Report. The second phase will be to evaluate additional network alternatives and supportive policies. This work will occur over the next several months. A work program will be developed by staff to address proposals by the County Council and the County Executive. It was already anticipated that staff would review and develop supportive land use and transportation policies during this time.

Attached to this Status Report are:

- Supplemental Staff Report (September 16, 1999)
- Initial Staff Report (September 10, 1999)
- Financial Resources for Montgomery County Transportation Facilities – In Search of a Fair Share

M-NCPPC

MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

8787 Georgia Avenue
Silver Spring, Maryland 20910-3760

September 16, 1999

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Jeffrey Zyontz, Acting Chief jz
County wide planning Division

FROM: Richard C. Hawthorne, Chief RCH
John Matthias, Coordinator JM
Transportation Planning

SUBJECT: Supplemental Memorandum on Transportation Policy Report Worksession #1

Staff has been reviewing the many comments received from the County Executive, municipalities, organizations, and individuals concerning the Staff Draft Transportation Policy Report. We are also aware of schedules for activities related to the decisions the Board must make concerning state and regional plans and funding. Based on those, staff has developed a recommended process.

Staff recommends that the Board follow a two-stage process for their review and recommendations on the transportation planning activities that will be presented in the coming months. The first stage deals with topics needing immediate action by the Board. We recommend the Board structure their discussion to allow for adopting a position on the following topics at the next TPR worksession. Staff can present recommendations on each of these topics at the work-session on September 23.

1. Maryland Consolidated Transportation Program FY 2000-2005: projects to be added for capital funding and project planning
2. Constrained Long Range Plan of MWCOG at current funding level
3. Letter to Governor Glendening concerning need for Transportation Capital Funding

A second, longer-term stage would address the concern that a subject as important as the Year 2020 Network was not being given sufficient review and discussion time. We recommend the Board direct staff to conduct analysis of additional networks. These would be those suggested by the

County Council and County Executive, as well as any the Board wished included. The citizen participation process from the TPR would continue. The goal would be to return to the Board in the Spring of 2000 with recommendations for an expanded CLRP and TPR network.

During this time, staff would also conduct the already-planned further analysis of supportive policies and actions from the Transportation Solutions Group and others. This could lead to recommendations from the Board to the County Council and County Executive on changes to County policies, or even revisions to land-use plans. Some actions are clearly best accomplished on a regional basis; a dialogue would be needed through MWCOG or other group for these.

Both these activities can be accomplished within the current work program since additional analysis related to future transitway plans was already anticipated and included.

STRUCTURE OF THE WORKSESSION DISCUSSION

Staff recommends that the Board structure the worksession today as follows

1. Staff will make an initial presentation on the study, leading to our recommendations, the basis for the staff recommendations, and the staff recommended plan.

2. The Board will discuss the process as outlined in the staff recommendation above. This would be for a two-phase process to address the most pressing decisions, allowing time for staff to obtain opinions on and evaluate some additional networks and policies.

3. The Board will review the staff draft letter to Governor Glendening concerning transportation funding. A revised version of this letter would go to the County Council with the CTP recommendations.

4. Staff will respond to Board questions and comments on particular aspects of the recommended network. Any additional information the Board needs could be identified at this time.

5. The Board will review the initial list of Consolidated Transportation Program projects and additions to the Constrained Long Range Plan..

This would be all that would be covered at this session. At the session on September 23, the staff would present any follow-up information requested, and their Constrained Long Range Plan recommendations for the current funding levels. The Board would be asked to make a recommendation to the County Council on the CLRP and the CTP at that time.

CONSOLIDATED TRANSPORTATION PROGRAM FY 2000-2005

The CTP FY 2000-2005 in its current draft form has no new construction projects. There are two basic types of projects included in the CTP:

- those that are to begin project planning, which takes them to readiness for detailed design

- those that have gone through initial (project planning) review/study and are ready for design and construction funds

The County has a very limited number of projects that are actually ready for design and construction since, until recently, MDOT has had a limited number of project planning studies in the County. One of the reasons for the TPR was that a number of large projects are in the Major Investment Study/Draft Environmental Impact Statement (project planning) stage now, and will be ready for design and construction in the next several years. However, for the upcoming CTP, the following projects are all at the later stages of planning or have undergone design already. These are the best candidates for funding, since the funds can be used immediately. They are from the list provided by the Council and Executive last year.

- MD 28 widening from Great Seneca Highway (MD 119) to Riffleford Road
- I-270 (east spur) interchange improvement at Old Georgetown Road (MD 187)
- I-270 (west spur) interchange improvement at Democracy Boulevard
- I-270 interchange /park and ride lot at Clopper Road (MD 117)

To this list, Park and Planning Staff have added the following projects for consideration:

- Georgetown Branch Trolley/Trail between Bethesda and Silver Spring (complete DEIS and begin design)
- US 29 Interchange at MD 198 (Sandy Spring Road)
- US 29 Interchange at Briggs Chaney Road
- MD 355 interchange at Montrose/Randolph Roads (design begins 2001)

For the next worksession, staff will attempt to prioritize these for the Board and would welcome Board guidance on their priorities.

For new Project Planning starts, the Board and Council presented a long list of projects to the Secretary of Transportation this past spring. To this list, staff recommends that the Board add the Corridor Cities Transitway as light rail from the Shady Grove Metrorail station to an interim location, Germantown, with eventual extension to Clarksburg. However, the Board **may** wish to defer this recommendation until MDOT completes its analysis of this alignment, which will answer in detail questions on busway versus light rail and why the CSX rail alignment is not desirable as suggested in public testimony. It is, however, always useful to let MDOT officials know our County priorities as soon as we can identify them.

Concerning the revisions to the MWCOG Constrained Long Range Plan, staff would recommend the Corridor Cities Transitway as light rail be added to the plan. This would probably use up any additional funds available for the 2025 horizon year for this plan, given current funding levels.

RCH:JM:kcw

mmo to MCPB re worksession 1.wpd

September 16, 1999

The Honorable Parris N. Glendening
Governor of Maryland
State House
Annapolis, MD 21401

Dear Governor Glendening:

The Montgomery County Council has reviewed the Draft Maryland Consolidated Transportation Program FY 2000-2005. Although we appreciate that some additional funds are provided for planning, we are very concerned that no new projects are funded for construction. We are writing to urge you to take a very different approach to transportation capital funding.

Traffic congestion has become a major concern of our citizens, leading the list over many other topics. Your administration is a national leader in Smart Growth, encouraging the Maryland Counties to channel new growth into areas where it can be served by transit, minimize environmental impacts and be near other existing infrastructure. However, we cannot maintain the current levels of service on roadways or transit without additional capacity that is added with planned new projects. The growth of Montgomery County, which leads the State, is not being matched by transportation infrastructure.

We have become increasingly aware of the gap between the resources being provided by the State for our transportation system and the serious current and future needs. The attached Memorandum on Financial Resources provides some details to this. In summary, it appears our total available funding for transportation capital over the next 20 years would be in the order of $1.05 billion. A recent study by Park and Planning Department staff indicates that a program more on the order of $3 billion is needed to provide projects to support Smart Growth. This level will still require us to accept significantly more congestion than seen today.

Our concern is that, without an increase in funding and dedication to constructing funded projects, we will see a decline in our County's economic health. As congestion grows, either we will be forced to use our Adequate Public Facilities Ordinance to sharply curtail growth, or we will see congestion creating conditions unacceptable to businesses and residents. This can cause a decrease in property values and economic activity. The importance of a healthy Montgomery County to the prosperity of Maryland is well established, and should be a matter of concern to your Administration.

We urge you to take the lead in clearly stating a policy of planning and funding needed transportation infrastructure in our County and the State. We will work with you in identifying the most appropriate funding mechanisms. but stress the need to obtain an appropriate share of any state-level resources for our County which provides much of the growth and value to the State. Along with the funding must come a commitment to provide the planning, design, engineering, and construction services to get projects on the ground.

We look forward to working with you on this critical issue.

draft

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MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

8787 Georgia Avenue
Silver Spring, Maryland 20910-3760

MCPB
Item # 12
9-16-99

September 10, 1999

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Jeffrey Zyontz, Acting Chief
County wide Planning Division

FROM: Richard C. Hawthorne, P.E., Chief RCH
John Matthias, Coordinator JM
Transportation Planning

SUBJECT: Initial Memorandum on Transportation Policy Report Worksession #1

RECOMMENDATION:

This Report has been prepared for the initial worksession on the Staff Draft Transportation Policy Report. By the time of the worksession, the Board will have heard two evenings of testimony on the Report. Since this memorandum was prepared before all the testimony was given, staff will not present it to you now or make recommendations. At the worksession, we will have an additional memorandum for you which will summarize key points of the testimony related to each of the major topics, and present a staff recommendation on each one. We will also identify any needed changes to the Staff Draft which we see as necessary based on the testimony.

In this memorandum, staff is providing a structure that we recommend the Board use in this worksession. We would present the information in the order of:

1. **Review of Year 2020 assumptions and policy options to influence the future**
2. **Overview of the recommended network and philosophy of future networks**
3. **Review of staff rationale for key recommendations in the Staff Draft**
4. **Prioritization among projects for Consolidated Transportation Program and Constrained Long Range Plan recommendations**
5. **Guidance for staff to prepare for Montgomery County Council sessions**

Staff recommends that the above outline be the agenda at the Worksession. Staff will provide a supplemental memorandum that day, presenting citizen comments in the context of the discussion on each item. The objective would be to develop a 2020 transportation network which has informal Board concurrence and a list of recommended projects for the 2000-2005 CTP and the MWCOG Constrained Long Range Plan. Supportive policies that are to be further investigated could be identified but not specified, since staff has not completed this next phase of the TPR analysis and thus has not made specific recommendation in this regard. After reviewing all the topics, it may be desirable for the Board to direct staff to prepare a detailed letter to the County Council outlining its key recommendations. The Staff Draft TPR will also be amended based on Board comments and republished as a Board-endorsed report. The extent of the modifications may be constrained by the short time available until Council takes up this topic.

SCHEDULE OF RELATED ACTIONS

The schedule for the review of the TPR is being driven by two impending activities, the preparation of the Maryland Consolidated Transportation Program for FY 2000-2005 and the update to the region's Constrained Long Range Plan. It is not necessary for the Board to "adopt" or endorse the staff Recommended Plan, amended as the Board wishes, in order to make recommendations on these two activities. Decisions on programming for individual projects, however, is always best done in full context with other projects, land use and supportive policies. The Recommended Plan was prepared as a future network to show how the various projects would fit together and what the total benefits and costs associated with them would be.

Consolidated Transportation Program: The Draft CTP will be presented to the Delegation and other officials at the annual Tour meeting on September 30, 1999. Staff has seen a draft; it contains no new construction projects for Montgomery County. The Council's T&E Committee is currently scheduled to discuss the CTP and TPR (assuming a revenue increase that will allow for more projects) on October 11. The full Council will discuss the same topics on October 19. Recommendations could then go to the County Delegation by early November in time for them to be used in preparing for the General Assembly Session. This is by far the most pressing schedule item.

Regional Constrained Long Range Plan: The CLRP discussions will begin in earnest in November and continue over the following three months. Ultimately, the CLRP will be adopted next spring by the Transportation Planning Board as the official regional plan. Before then, it undergoes a number of reviews by technical groups. Discussions with MWCOG and Maryland Department of Transportation staff indicate that Montgomery County should have project recommendations prepared by early November, but changes can be made after that date.

One key assumption for the plan is that additional funds will be made available in Maryland. The current CLRP assumes current funding trends, with approximately $800 million available for the next 20 years. Since the updated plan will go to 2025 to meet federal requirements, this may expand to about $1 billion for the life of the plan. This amount would leave the County with significant congestion, low transit mode shares, and decreased accessibility to jobs and households. Federal Regional Plan guidelines require a plan "constrained" by the projected resources until formal action is taken to adopt additional revenue. This would mean reviewing the current projects in the

plan and, if they are seen as needed, only a few more could be added. The Board may want to make recommendations on their priority of projects for the CLRP for various future levels of funding. This is the next most pressing time frame for the review.

STAFF REVIEW OF SUPPORTIVE POLICIES

The work program for the TPR has always included a follow-up phase after the basic network. This follow-up would investigate supportive policies. This is especially relevant given the lengthy Transportation Solutions Group Report which we summarized in Chapter I of the TPR. Many citizens have already commented and more are expected to testify on the need for better transit-supportive land use and other policies that would change the current travel patterns and modes. Staff will be investigating many of these over the next several months, and will make a report to the Board on how best to implement or incorporate these policies into County planning and regulatory activities. This can include investigating how regulatory and planning policies can better support current County goals to encourage development near Metrorail and future transit stations, and increase transit use.

PURPOSE AND WORK SCOPE OF THE TRANSPORTATION POLICY REPORT

A review of the Report purpose is essential to understanding the recommendations. When the study began, there were six major transportation project planning studies underway. It was clear that some means of reviewing them and making decisions within a network context was essential. The six major projects (I-270 transit and road, Capitol Beltway, US 29 Transitway, ICC, Georgetown Branch Trolley/Trail, and Georgia Avenue Busway) were used to develop alternative networks, with other key master-planned transportation projects being tested along with these networks. Since most of these projects are undergoing extensive project-level review, or have recently completed such a review, the TPR was not intended to study each individual project. Rather it was, and is, a network approach at the planning level, showing the benefits and issues associated with how the projects can be effectively combined. The emphasis was primarily on the transitway network, since all the six projects had a transit or bus/HOV component (except for the ICC). However, in the later stages of the TPR, it became clear that decision-making on transitways was not possible without the accompanying framework of planned roads, so the highway analysis was included.

The land use inputs to any transportation analysis are critical, as are assumptions about future trip-making conditions such as parking. Staff plans to begin an analysis of associated policies that could support the County transit and demand management efforts after the initial discussions. Given the purpose of the TPR, and the time-period it had to be completed in, it was never intended to include changes in land use different from the County's adopted forecasts and master plans. At their request, the land use element was to be lead by the Citizens Planning Association, and staff supported their efforts to the maximum extent. However, changes to land use patterns would require a multi-disciplinary effort involving other Divisions in the Department, and be much more extensive than the work program for the TPR thus far. If the Board wishes to pursue this, the FY 2001 Budget is being developed now and appropriate items could be included.

RCH:kcw

mmo to mcpb re TPR 9-10.wpd

M-NCPPC

MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

8787 Georgia Avenue
Silver Spring, Maryland 20910-3760

MEMORANDUM

TO: Montgomery County Planning Board

FROM: Jeff Zyontz, Acting Chief
County-Wide Planning Division

DATE: August 23, 1999

SUBJECT: Financial Resources for Montgomery County Transportation Facilities - In Search of a Fair Share

The purpose of this memo is to (a) determine the match between fiscal resources available for transportation infrastructure and the 20 year need as recommended in the Draft Transportation Policy Report; (b) examine the means to leverage federal funds; and (c)examine the percentage of available state and federal funds Montgomery County receives compared to measures of social and economic activity in Montgomery County. This is not a policy position paper. It is to look at the adequacy of existing county and state fiscal resources dedicated toward transportation operations, maintenance and capital and the magnitude of change needed to meet Montgomery County needs.

Following this summary, there are two attachments. The first is a report from Cambridge Systematics on estimating available funds for capital projects given the existing structure of state funding. They have also set forth methods of leveraging federal resources. Attachment 2 is a report from the M-NCPPC Research and Technology Division, comparing the social and economic activity of Montgomery County in comparison to the rest of the state of Maryland.

1- Needs Compared to Projected Resources

Based upon projections from Cambridge Systematic's of current levels of fiscal effort, and accounting for a growth in operating expenses first, Montgomery County will have some $2.1 billion dollars available for capital transportation facilities of every type from all sources of revenue over the next 20 years. Based upon a review of the county's Capital Improvements Program, just under 50% of capital expenditures are dedicated to rebuilding existing roads, bridges and parking facilities unrelated to transit and service infrastructure. The State Consolidated Program has 52% of capital expenditures committed to "system preservation". As the transportation infrastructure ages the percentage of funds going toward capital reconstruction may increase, however, for the purpose of discussion, it has been assumed that half of the dollars available can go toward capacity additions to the transportation facilities.

Assuming Montgomery County's share of state funds is the same as that indicated from the Consolidated Transportation Program and 50% will go for capital maintenance, new federal funding will increase money available for new transportation infrastructure in the 2020 constrained COG Plan to $1.05 billion over the next 20 years. The county's need for funds, however, is more on the order of $2.8 billion excluding additional operating expenses for that new infrastructure. Both the expected funds for new capital and the infrastructure costs estimates are "ballpark" numbers. There is a gap of $1.75 billion over the next 20 years between currently expected funding and transportation infrastructure needs. In rough terms, our transportation needs for new capital facilities are three times the existing level of funding presently anticipated expenditures on new facilities.

The current Maryland Consolidated Transportation Program, which includes both roadway and transit improvements allocates 12.4% of total available funds to Montgomery County. This is somewhat more than the county's recent past share. If Montgomery County's share is to remain the same, and the county's unmet fiscal need is $1.75 billion, then the state would need to raise taxes to such that it produced $14 billion in additional revenue over the next 20 years ($700 million per year). This level of new revenue is highly unlikely. However, every 1% increase change in the percentage share of state funds going to Montgomery County reduces the unmet need of $168 million even without a tax increase. If Montgomery County's share of available funds were to increase to 15%, unmet needs would be $730 million and a tax increase of $4.9 billion ($243 million per year).

A considerable portion of money available for transportation infrastructure is from federal dollars. Federal dollars are deposited in the state of Maryland Transportation Fund with motor fuel tax receipts, vehicle titling taxes, registration fees and a fraction of corporate income tax revenues. A minimum amount of state aid is established by formula to counties in Maryland. The formula applies to approximately 30% of total available funds. As a matter of interest, Montgomery County is guaranteed 11.9% of those formula funds. The remainder of the money is distributed on the basis of "need" as determined by the Department of Transportation.

2- What is Montgomery County's Fair Share?

There are statistical reasons to argue for an increased share of state transportation resources. The following gives a flavor for Montgomery County's statistical prominence in the state. The general description of Maryland's transportation allocation policy is that it is based upon need. At the time of this writing, a ranking based upon roadway congestion is not available.

Montgomery County has:

16% of the State's Households

17% of the State's Population and Labor Force

19% of the State's At-Place Employment

32% of the State's 1998 Jobs Growth

28% of the Projected Job Growth to the Year 2010

33% of the State's High-Technology Jobs

24% of the State's Assessable Base

25% of the State's Income Tax revenues

18% of the State's Registered Vehicles and Licensed Drivers

15% to the State's Automotive Sales Sax Revenues

The economic vitality of the state is very much connected with the success of Montgomery County.

3- Flexibility within TEA-21

Besides increasing Montgomery County's share of future federal fund or increasing state resources from additional taxes, the third method of getting additional funds is by leveraging federal dollars. TEA-21 is extremely flexible in switching the use of funds between roadway and transit projects. Any alternative transit network is as good as another solely from the standpoint of federal funding. TEA-21 allows for special earmarking of funds by Congress for "new starts". This provision removes the vast bulk of discretionary funds formally allocated by the Department of Transportation. There is still $2.5 billion available for "new starts". A preference is given for projects that exceed the 20% local matching funds required. The prospects for such additional funds would be in the hands of our representatives in Congress.

TEA-21 offers innovative ways to fund the 20% match including funds from the private sector in joint development projects and tax increment financing district. TEA-21 also permits states to issue guaranteed tax free bonds based upon the expected grants from the TEA-21 program (GARVEE Bonds - Grant Anticipation Revenue Vehicle) as a means of leveraging funds.

Attachments

Financial Analysis for Montgomery County

Funding Available for New Transportation Projects and Montgomery County's Share of State Transportation Trust Funds

The federal highway and transit programs are primarily financed with proceeds from fuel and other transportation-related user taxes and fees deposited into the Federal Highway Trust Fund (HTF). The funds deposited into the HTF are subject to congressional authorization, generally every six years.

Due to a strong economy, the Taxpayer Relief Act of 1997 (which dedicated 4.3 cents of the federal fuels tax back into the HTF) and mounting political pressure, the Transportation Equity Act for the 21st Century (TEA-21) provides for a substantial increase in federal authorizations over ISTEA levels.

The State of Maryland is forecast to obtain approximately $2.5 billion in highway obligations and $792.5 million in federal transit obligations during the TEA-21 time frame (1998-2003). Federal-aid obligations are deposited into the State of Maryland's Transportation Trust Fund (TTF) and are expended on projects identified in the state's Consolidated Transportation Program. As such, the Maryland Department of Transportation (MDOT) does not pass-through Federal-aid highway funds to Montgomery County for countywide discretionary use.

The amount of funds MDOT expends on statewide transit and highway infrastructure within each local jurisdiction is based upon need as determined through a county-by-county analysis of economic trends, congestion and demand for additional capacity. During the 1999-2000 biennium, MDOT has identified approximately $132.8 million in TTF-funded highway and bridge improvements for Montgomery County.

The TTF is primarily funded through motor fuel taxes, motor vehicle titling taxes, registration fees, federal aid funds, and a fraction of total corporate income tax revenues. These revenues are apportioned among the local jurisdictions through the Gasoline and Motor Vehicle Revenue Account (GMVRA). MDOT shares 30 percent of the GMVRA revenues with local jurisdictions, after deductions for other state agencies, based on a formula that includes two factors (share of total statewide vehicle registrations and share of total road mileage) that are weighted equally. Montgomery County and local municipalities within the county currently receive approximately 13.9 percent of total GMVRA apportioned funds. After deducting the local municipality share, Montgomery County presently receives approximately 11.9 percent of total GMVRA revenues apportioned among all local jurisdictions. From a GMVRA formula standpoint, recent growth in the county's share of road mileage has been almost completely offset by a declining share of vehicle registrations.

In addition to GMVRA apportioned funds, MDOT funds projects through its CTP. The capital funding

levels identified in the CTP include the GMVRA apportioned funds. Though GMVRA apportioned funds do not represent the total state contribution, forecast growth in Montgomery County's GMVRA factor, as outlined above, was used as a baseline for determining future growth in the county's share of total TTF funding.

Based on the analysis conducted for this study, Montgomery County is forecast to receive an average of 12.4 percent of total statewide capital expenditures on highway and transit during the 1999-2004 time frame. Based on assumptions outlined later in this report, this forecast assumes that the county's share of total TTF expenditures will grow by 0.1 percentage point from 12.4 percent in 2005 to 12.5 percent in 2018. Based on these assumptions, MDOT is forecast to expend approximately $1.3 billion ($67.5 million average annual) for highway and mass transit capital projects in Montgomery County during the 1999-2018 time frame.

Local/other revenue sources include general obligation bonds, current revenue, contributions, mass transit fund, parking revenue, federal aid, impact taxes, and other sources. The amounts shown here do not include potential revenue from any proposed, pending or new revenue sources. As shown in Table 1 and based upon assumptions outlined below, total local/other revenues for capital projects are forecast to total $751.7 million ($43.9 million average annual) during the 1999-2018 time frame.

Annualized breakdowns of each revenue source are included in the attached Appendix. Total revenues are forecast to exceed $2.1 billion during the 20-year study time frame. Average annual revenues for all highway, road, bridge and transit capital projects are forecast to exceed $105 million. Capital projects are defined as all enhancement and rehabilitation projects included in either the county CIP or the statewide CTP.

Table 1. Revenues by Source for Montgomery County Capital Projects, 1999-2018 (millions of dollars)

Source	Total Revenues	Average Annual
State Transportation Trust Fund	$1,349.1	$67.5
Local/Other	751.7	37.6
Total	$2,101.5	$105.1

Table 2 shows average annual expenditures by mode and effect during the 1999-2004 time frame, as identified in the Montgomery County Capital Improvement Program. The amounts shown in Table 2 do not include most expenditures of state TTF funds. The vast majority (74 percent) of the county's operating and maintenance budget is projected to be used on the transit system, while over 70 percent of the capital budget is dedicated for use on roads, bridges, traffic improvements and highway services. During the 1999-2004 time period, the county's capital program is forecast to comprise over 40 percent of total expenditures.

Table 2. Operating and Capital Expenditures by Mode by Montgomery County, 1999-2004[1] (millions of dollars)

	Operation and Maintenance	Capital	
Roads and Bridges	$19.9	$36.5	$56.4
Transit	56.5	11.3	67.8
Bicycle/Pedestrian		3.9	3.9
Total	$76.4	$51.7	$128.1

[1] Amounts shown here include 46.5 million in state and federal aid.

In the absence of future tax rate increases, the annual share of total annual expenditures dedicated for operating and maintaining the existing system will grow over time. Conversely, funds available for capital improvements will decline in both absolute and real terms. Table 3 presents forecast capital expenditures by mode for Montgomery County during the 1999 to 2018 time frame. As shown, total highway and road expenditures are forecast to total almost $1.3 billion ($63.0 million average annual) during the study time frame. Transit expenditures are forecast to total $753 million ($37.7 average annual) and bike/pedestrian expenditures are forecast at approximately $87.2 million ($4.4 million average annual).

Table 3. Capital Expenditure by Mode for Montgomery County, 1999-2018 (millions of dollars)

Source	Total Expenditures	Average Annual Expenditures
Highways and Roads	$1,261	$63.0
Transit	753.4	37.7
Bike/Pedestrian	87.2	4.4
Total	$2,101.5	$105.1

Methodology and Assumptions

State of Maryland Federal Revenues

Apportionments: Formula-based apportionments include sums authorized for various programs and divided among states according to formulas. Examples of formula-driven apportionment programs include the Surface Transportation Program, Congestion Mitigation and Air Quality Program and Interstate Maintenance Program. Amounts identified within this forecast include High Priority Project Program funds and redistribution of Minimum Guarantee funds. Under TEA-21, budgetary provisions provide guaranteed funding levels which allow for relatively precise funding estimates. Growth rates for federal highway and transit funding levels for the State of Maryland during the TEA-21 time frame (1998-

2003) were obtained from data compiled by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), and based upon provisions set forth under TEA-21.

Obligation Ceiling: An obligation ceiling is a limitation on obligations set forth by Congress in authorization and appropriations acts. By placing a ceiling on obligations, Congress indirectly controls future cash outlays. The effective obligation ceilings identified within the forecast include the impact of bonus limitations and exempt programs. The obligation limitations for FY 1998 and FY 1999 were obtained from data compiled by FHWA. The obligation ceilings from 2000 through 2003 were computed by dividing the obligation limitation for all non-exempt programs plus any exempt program funding by the total authorizations for all non-exempt programs plus any exempt program funding. Exempt programs were included in order to allow for an accurate comparison of total funding levels to apportionments, as already identified by FHWA. This methodology yields a conservative 88.8-89.4 percent obligation ceiling.

State and Federal Revenues for Montgomery County

During the 1999-2004 time frame, forecasts are based on data provided by MDOT. Long-term forecasts of total TTF revenues are based on data prepared by MDOT for the 1999 Financial Plan Update of the Constrained Long Range Plan (CLRP). These long-term funding estimates are based on an analysis of historical program costs. Montgomery County currently receives 12.4 percent of total TTF revenues apportioned among all local jurisdictions. This amount does not include funds identified in the CTP for the Maryland Motor Vehicle Administration, Maryland Aviation Administration and the Maryland Port Administration. The forecast does include amounts distributed to the Mass Transit Administration, Washington Metropolitan Area Transit and the State Highway Administration. This forecast uses linear regression analysis to forecast change in Montgomery County's share of TTF-funded projects during the forecast time frame. The linear regression trend line demonstrates that growth in the county's share of road mileage may be almost completely offset by its declining share of total statewide vehicle registrations. Therefore, this forecast assumes almost completely stagnant growth in Montgomery County's share of total TTF apportioned funds.

Local/Other Revenues

All local and other revenue sources, excluding state TTF funds, were combined and forecast based on assumptions in the data supporting the 1999 Financial Plan Update of the CLRP.

Operating and Maintenance Expenditures

Base-year (1999 and 2000) highway, bridge and transit operating and maintenance expenditures were obtained from the Montgomery County Office of Management and Budget. Operating and maintenance expenditures for highways and bridges were converted to costs per lane mile by dividing costs by total county lane mileage. Growth in highway and bridge operating and maintenance expenditures is, therefore, a function of growth in county lane mileage and growth in the costs per lane mile caused by inflation.

Growth in county lane mileage is based upon the data supporting the 1999 Financial Plan Update of the CLRP. Table 1 shows that total county lane mileage is forecast to grow from 4,539 in 1999 to 5,405 in 2018, thus representing an average annual growth rate of 0.9 percent. Therefore, total county lane mileage is forecast to grow by approximately 19.1 percent over the 20-year study time frame.

Table 4. Total County Lane Mileage

Year	Lane Mileage	Average Growth Rate
1999	4,539	
2018	5,405	0.9%

Inflation estimates are derived from data obtained from the 1999-2004 Draft Montgomery County Capital Improvement Program (CIP). In 1999, inflation is assumed to be 3.1 percent but grows to 3.5 percent by the end of the CIP time frame (2004). The annual rate of inflation is assumed to remain at 3.5 percent for the remainder of the forecast time frame.

Transit operating and maintenance expenditures are assumed to grow commensurate with inflation, as they were in the data supporting the 1999 Financial Plan Update of the CLRP.

Capital Expenditures

Capital expenditures for roads, bridges, traffic improvements, highway services, transit and bicycle/pedestrian facilities during the 1999-2004 time frame were obtained from the Montgomery County Draft 1999-2004 CIP and the 1999-2004 Maryland Department of Transportation CTP. For the local capital program, expenditures during the 2005-2018 time frame represent the difference between total forecast revenues and forecast operating and maintenance expenditures on an annualized basis. For the state contribution, expenditures are based upon base-year data in the CTP grown commensurate with long-term MDOT estimates of capital expenditures.

Leveraging Current Transportation Revenue Sources

The traditional federal aid highway programs have traditionally operated as cost-reimbursement programs, with a state's share of total apportioned funds determined by formulas. This method continues under TEA-21. Special earmarks of highway funds for projects have also been specified in legislation. Most federal aid for public transportation also depends on formulas. Special earmarks are also made for public transportation projects. Most money for "new starts" has been allocated directly by Congress, removing discretion over these allocations from the United States Department of Transportation (DOT). Federal funding for new starts provides the primary opportunity for any jurisdiction to break out of the formula process and receive a substantial portion of federal TEA-21 funding in comparison to other jurisdictions.

Traditional grant programs have specified matching requirements, generally 20 percent. There is no incentive to overmatch federal funds. Thus, aside from receiving earmarks for special projects through Congress, traditional federal aid is leveraged at a fixed ratio. However, recent change in federal law has resulted in the authorization of new flexible matching provisions; local jurisdictions may use private funds to match federal funds, may adjust the matching ratio over time to meet cash flow needs, or may eliminate the matching requirement altogether. These flexible matching provisions, or grant management techniques, are outlined below:

Flexible Match. Flexible match allows the value of private and certain state or local contributions – including publicly owned property – to be used to satisfy the non-federal matching requirement for Federal-aid funding. Funds from other federal agencies may count toward the non-federal share of recreational trails and transportation enhancement projects. Funds from the DOT's Federal Lands Highway Program may count toward the non-federal match for projects within or providing access to federal or Indian lands.

Toll Credits. The non-federal share of a project's cost may be met through a soft match of toll credits. A state or local jurisdiction can earn such toll credits to the extent that it spends excess toll revenues (revenues not needed for debt service, returns to investors, or the operation and maintenance of toll facilities) on its highway system. The amount of credit earned equals the amount of toll revenues spent on non-federal highway capital improvement projects. The state must certify that its toll facilities are being properly maintained before excess revenues can be credited. It also must pass an annual maintenance of effort test, which assesses whether the state's transportation system is growing over time, as measured by non-federal capital expenditures. Toll credits are considered an investment tool since they are designed to encourage states and local jurisdictions to increase capital investment in transportation infrastructure. However, they may also be considered a cash flow tool since they enable states to simplify program administration. To the extent toll credits are available, a state or local jurisdiction may use up to 100 percent federal funds to construct some projects while using the state or local funds that would have been required to match federal funds to construct other projects with 100 percent state or local funds.

Advance Construction. Under advance construction, a state or local jurisdiction may use non-federal funds to advance a Federal-aid project while preserving its eligibility to receive Federal-aid reimbursements in the future. At some future date when the state or local jurisdiction does have sufficient obligation authority, it may convert the advance-constructed project to a Federal-aid project by obligating the permissible share of its Federal-aid funds and receiving subsequent reimbursements. There is no commitment of federal funds to the project until the state obligates its Federal-aid on the future conversion date. The state generally must limit its use of advance construction to an amount equal to three years of anticipated Federal-aid funding plus its existing unobligated balance of apportioned funding. This procedure allows a state or local jurisdiction to begin an eligible project even if it does not currently have sufficient Federal-aid obligation authority for the federal share of project costs.

Partial Conversion of Advance Construction. Partial conversion of advance construction (PCAC) allows a state or local jurisdiction to convert an advance-constructed project to a Federal-aid project in

stages rather than all at once on a single future date. This refinement to the advance construction procedure enables a state or local jurisdiction to tailor its use of Federal-aid obligation authority and receipt of subsequent cash reimbursements according to its cash flow needs over the developmental life of an eligible project.

Tapered Match. With tapered match, the non-federal matching ratio is permitted to vary over time. Federal reimbursement of state or local expenditure can be as high as 100 percent in the early phases of a project provided that by the time the project is complete the overall federal contribution does not exceed the statutory Federal-aid limit (typically 80 percent of project costs). This tool enables state and local jurisdictions to commence Federal-aid projects even if they lack the required state match at the outset.

There are also opportunities under current federal legislation to take advantage of innovative financing mechanisms, through which agencies may borrow funds to expedite the construction of projects. Many of the mechanisms may also be used to enhance the credit quality of projects, thus reducing transaction friction and the cost of borrowing. Innovative borrowing techniques include:

Transportation Infrastructure Finance and Innovation Act (TIFIA). The Transportation Infrastructure Finance and Innovation Act (TEA-21, Section 1503) seeks to address the funding shortfall for large surface transportation projects by providing direct loans, loan guarantees and standby lines of credit to public and private project sponsors at taxable Treasury rates. The flexible features of credit assistance offered under TIFIA (junior-lien on annual revenues and flexible payment schedule) would allow Montgomery County to structure credit packages for area projects in a manner than enables loan repayments to coincide with the receipt of revenues rather than adhere to inflexible repayment schedules.

GARVEE Bonds. The construction phase of Maryland projects could be funded with Grant Anticipation Revenue Vehicle (GARVEE) bonds, which are state issued bonds secured, at least in part, by future years' federal highway apportionments (e.g., STP or CMAQ funds). In addition to securing project financing with future federal-aid apportionments, states are allowed to advance construct or declare the right to claim future federal reimbursements for the full amount of debt service over the life of the bonds. Each year the state can partially convert this authority by obligating Federal-aid in an amount equal to 80 percent of annual debt service. Though GARVEE bonds would carry interest and other debt-related costs, these costs may be minor in relation to the costs associated with construction delays, congestion, inflation, and forgone economic benefits.

State Infrastructure Banks. A State Infrastructure Bank (SIB) is a state or multistate investment fund that provides loans, credit enhancement and other forms of assistance to project sponsors. The State of Maryland has established a SIB, and could provide credit assistance to county projects at reasonable, subsidized interest rates.

Railroad Rehabilitation and Improvement Financing (RRIF) Program. The RRIF program (TEA 21, Section 7203) provides direct loans and loan guarantees to rail and intermodal projects at taxable Treasury rates. Under RRIF, project sponsors are required to pay up-front credit risk premiums. Credit

risk premiums are set by the federal government equal to expected losses due to default, delinquency and other factors. Due to this feature, credit assistance under RRIF may be cost prohibitive.

State Project Loans. Under Section 129 of Title 23 of the United States Code (23 U.S.C.), states may use federal aid to fund loans to projects with dedicated revenue streams. States have the flexibility to negotiate interest rates and other terms of these loans. When a loan is repaid, the state must use the funds to make loans or grants to other Title 23 eligible transportation projects. Section 129 loans allow states to leverage additional transportation resources and recycle assistance to projects that are not in a position to make repayments.

Certificates of Participation. Certificates of participation (COPs) involve tax-exempt bonds that are issued by a public agency and are backed with a very specific source of revenue, such as equipment or facility lease payments. An illustrative COP structure could involve: a) bonds issued by a state agency at a tax-exempt rate; b) the proceeds of the bond issue used to purchase transit vehicles and/or facilities; c) the state entity leasing the equipment to one or more transit systems; and d) the lease payments used to meet the annual debt service on the outstanding debt. Under the COP structure outlined above, the state would issue tax-exempt bonds with maturities that match the lease terms of the assets purchased by the state with the proceeds of the debt issuance. Lease payments can be made with any revenue source, including federal grant funding.

Though debt financing carries interest and other debt-related costs, these costs may be minor in comparison to the costs associated with construction delays. As Montgomery County continues to grow in population, project right-of-way costs and the costs associated with congestion (accidents, wasted fuel and driver time, vehicle maintenance and shipping delays) translate to forgone economic benefits and higher construction costs. The innovative borrowing tools outlined above are designed to reduce project costs by:

providing access to affordable junior-lien financing;
demonstrating federal acceptance for a project;
improving the coverage factor on outstanding debt;
reduce risk for private investors;
facilitating a state or local jurisdiction's access to private capital; and
accelerating construction time lines.

In addition to the grant management techniques and financing methods outlined above, there are a wide range of funding methods available to Montgomery County (Table 5). The applicability and revenue productivity of many of these options were explored by a study performed for the Transportation Planning Board in 1997. Generally, the study found that of the sources outlined below, only sales taxes could yield sufficient revenues to close current funding gaps. Moreover, only a combination of several sources could yield adequate revenues to meet the needs of the Washington metropolitan region on a continuing basis.

Program Mix and Available Funding

Both federal aid transportation funds and state transportation funds are highly flexible among modes, and among types of expenditures within each mode, with the exception that federal funding of transit operations has been eliminated. However, federal transit funds can be used for some transit maintenance expenses. Federal-aid highway funds can be flexibly transferred among a wide variety of categories. The State of Maryland programs its funds on a multimodal basis.

Projects need to be included in the MWCOG transportation improvement program to be eligible for funding from federal aid sources. MWCOG has representation from a number of local jurisdictions and the states. Therefore, a primary determinant of whether a project will move forward is the degree of support from local officials and the public. Other than public support, the mix of transit vs. highway projects will not impact strongly on funding availability since funding is so flexible.

In Search of a Fair Share of Transportation Resources

The indicators of economic and fiscal activity suggest that Montgomery County accounts for *at least* 15-20 percent of the state's critical economic factors. Based upon anticipated growth, Montgomery County's share of the state's economic activity is far higher.

Montgomery County's contribution of one-third of the state's current and projected job growth may not be supportable with its current share of State transportation expenditures. Presently, there are almost 36,000 jobs that exceed County Council established transportation staging ceiling

The Research & Technology Center staff also ranked Montgomery County, along with all other counties in the state, on many transportation and related indicators. These rankings show that Montgomery County leads other counties in travel demand and in generating revenues to the State, but trails other counties in receiving state aid for transportation facilities, when viewed from a proportionate basis (e.g., per-capita, per jobs, per licensed driver, etc.).

Our conclusion is that additional funding for Montgomery County transportation projects is justified because every lane-mile of roadway in Montgomery County is supporting more residents and more jobs than in any other locality. This does not take into account some of the benefits associated with Smart Growth, which is encouraged by providing infrastructure to support growth in established urban areas/suburban areas. Continued economic growth and protection of the quality of life of Montgomery County residents is essential to the long-term vitality of the State of Maryland.

Indicators of the County's Appropriate Share of State Transportation Expenditures

For this memo, Research & Technology Center staff divided the indicators into several categories: transportation expenditure indicators, transportation demand indicators, taxation indicators, and population/economic indicators.

Transportation Expenditure Indicators

These indicators review Montgomery County's current share of state transportation expenditures. It also includes indicators of Montgomery County's share of other state aid to local governments to show that Montgomery County is not receiving a disproportionate share of state aid in other categories.

In summary, these indicators show that Montgomery County is receiving between 7 and 10 percent of the state's transportation expenditures. On a per-capita or per-job basis, Montgomery County ranks near the bottom in receiving state revenues.

7.5% Current Percentage of State Highway User Revenues Awarded to Montgomery County
Over the past ten years, Montgomery County has received an average of 7.5 percent of highway user revenues awarded to Maryland counties.

11.8% Current Percentage of State's Expenditures on Roads Constructed in Montgomery County
Over the past ten years, Montgomery County has received an average of 11.8 percent of highway user revenues awarded to Maryland counties. The peak was 22 percent in 1991, followed by 18 percent in 1998. For 2000, the expected share of the State's highway user revenues awarded to Montgomery County will be 9 percent.

20th Rank Among Counties for State Highway Expenditures Per Capita
Montgomery County received $53 per resident in state highway expenditures in 1998. Only three other counties received a smaller share: Cecil, Carroll, and Somerset. Baltimore County and Prince George's County received approximately double ($109 and $105, respectively) Montgomery County's per-capita amount.

22nd Rank Among Counties for State Highway Expenditures Per Job
Montgomery County received $80 per job in state highway expenditures in 1998. Only one other county received a smaller share: Carroll. Howard County, Prince George's County, and Baltimore County ranked sixth, seventh, and eighth, receiving more than double Montgomery County's per-job allotment.

9% Current Percentage of State's Aid to Local Governments
Over the past ten years, Montgomery County has received an average of 9 percent of total state aid awarded to Maryland counties. The peak was 11 percent in 1991 but dropped to 9 percent for all years since then (except 1997, when it increased to 10 percent).

10% Current Percentage of State's Aid to Local Governments for General Government Projects
Over the past ten years, Montgomery County has received an average of 10 percent of total state aid awarded to Maryland counties for "general government" projects, a category that includes transportation. However, the percentage in the past 6 years has been 9 percent or less. The County receives about 16% of the state's aid for community colleges, about 7 percent of state aid to local government for health projects, 6 percent of state aid to local governments for libraries, and 6.5 percent of state aid to local governments for public school projects.

Transportation Demand Indicators

Although Montgomery County only has 7.2 percent of the state's total vehicle-miles of travel, according to the State Highway Administration, it has the 5th highest level of roadway usage (vehicle-miles of travel per lane-mile of roadway). More importantly, Montgomery County has the largest number of origins and destinations (households and jobs) during commuting periods in the state, as well as the largest number of registered vehicles and licensed drivers.

Since Montgomery County has the largest resident demand for transportation services in the state, why doesn't Montgomery County have the largest amount of vehicle-miles of travel? Three major reasons may be that Montgomery County drivers may make shorter trips, on average, than in most other localities; are more likely to take transit, carpool, or otherwise make more efficient use of existing transportation facilities; and Montgomery County probably has a smaller percentage of its total VMT due to "pass-through" trips.

11.6% Share of State's Total Transit Ridership
The Report of the Governor' Transit advisory panel indicated that there were 570,000 transit riders in the State. In 1998 transits ridership in Montgomery in Montgomery County (boardings in the P.M.) Were estimated to be 66,500.

14.0%Share of State's Total Vehicle Miles of Travel
According to the State Highway Administration, Montgomery County has 14 percent of the total vehicle-miles of travel (VMT) in the state. Montgomery County, with 6.6 billion vehicle-miles of travel, is third among counties in the state, following Prince George's County (7.3 billion VMT) and Baltimore County (7.2 billion VMT).

5th Rank of Montgomery County in VMT per Lane-Mile of Roadway
On average, there 960,557 vehicle-miles of travel for every lane-mile of roadway in Montgomery County. This measure of roadway usage places Montgomery County fifth in the state, behind Prince George's County, Baltimore County, Howard County, and Anne Arundel County.

18% Share of State's Registered Vehicles
Montgomery County has 18.3 percent of the state's registered passenger motor vehicles (does not include motorcycles, recreational vehicles, trailers, or boats).

1st Rank Among Counties in Registered Motor Vehicles
Montgomery County's ranks first in the number of registered passenger motor vehicles with 537,128. Baltimore County is second with 463,543 and Prince George's is third with 430,930.

18% Share of the State's Licensed Drivers
Montgomery County has 17.9 percent of the state's licensed drivers, according to the state Motor Vehicle administration.

1st Rank Among Counties in Number of Licensed Drivers
With 623,186 licensed drivers, Montgomery County ranks first in the number of drivers among Maryland counties. This is almost 100,000 more licensed drivers than second place Baltimore County, with 529,111 licensed drivers.

Transportation Facilities (Supply) Indicators

Montgomery County has 10 percent of the state's total lane mileage, but ranks 22nd among 24 counties in terms of lane-miles of roadway per 1,000 population.

Lane-mileage is the number of miles of roadway multiplied by the number of lanes of roadway. This memo refers to four different kinds of roadway: local, state, interstate, and total. Readers are alerted that the words "county" and "state" can be designate roads that are "locally-controlled" and "state-controlled" or they could refer to the geographic location of the roadway. For this reason, there are totals for state *roads in each* county, *as well as for* county *roads in the* state. *We hope that the context in which these words are used makes the meaning clear.*

2nd **Rank Among Counties by Total Lane Mileage**
With 6,826 lane-miles of roadway, Montgomery County is second in the state, following Baltimore County's 7,143 lane miles, when looking at total lane-miles of roadway. However, Montgomery County is third when ranked by lane-miles of *state* roadway and third in lane-miles of *interstate* roadway.

At 495 square miles, Montgomery County is the fifth largest county (by land area) in the state, following Frederick (663 square miles), Garrett (657), Baltimore County (612) and Dorchester (593 square miles).

10% **Percent of the State's Total Lane Mileage**
Montgomery County has 10 percent of the state's lane-miles of roadway. Montgomery has 18 percent of the county lane-mileage in the state, but only about 8 percent of the state lane-mileage and about 12 percent of the state's interstate lane-mileage.

22nd **Rank Among Counties by Lane-Miles of Roadway Per 1,000 Population**
Montgomery County ties for next-to-last with Prince George's County (out of 24 counties) for lane-miles of roadway per capita. Montgomery County and Prince George's have 7.9 miles of roadway per 1,000 residents. Baltimore's 7.6 miles of roadway per 1,000 residents is only slightly less. Rural counties such as Garrett (72 miles of roadway per 1,000 residents), Dorchester (54 miles), and Kent (49 miles) dominate the top of the list.

23rd **Rank Among Counties by Lane-Miles of *State* Roadway per 1,000 Population**
Montgomery County's rank of 23rd in this category is a rank of "last" because of Baltimore City's unique arrangement with the state for roadway construction. Montgomery County's 1.6 miles of state road per 1,000 residents trails every other county in the state. Kent County has the most miles of state roads per 1,000 residents:18.

11th **Rank Among Counties by Lane-Miles of *Interstate* Roadway per 1,000 Population**
Montgomery County has 0.4 miles of interstate roadway for every 1,000 residents, very much in the "middle of the pack" for Maryland counties, although -- since11 Maryland counties have no

interstate roads at all -- Montgomery County is near the bottom among counties with any interstate roadway.

23rd **Rank Among Counties by Lane-Miles of *Local* Roadway per 1,000 Population**
Montgomery County has 6.0 miles of local roadway for every 1,000 residents, trailing every county save Prince George's. Garrett County has the most local roadway lane-miles per 1,000 residents: 49.7.

23rd **Rank Among Counties by Lane-Miles of Roadway Per 1,000 Workers**
Montgomery County has 13.6 miles of roadway per 1,000 workers, the next-to-smallest amount of any county in the state (Prince George's County ranks last with 13.3 lane-miles per 1,000 workers). Somerset County leads the state with 158.2 lane-miles of roadway per 1,000 workers. The rankings are virtually the same for lane-miles of *local* roadway per 1,000 workers. ("Workers" defined as county residents either currently employed inside or outside the county or looking for work).

23rd **Rank Among Counties by Lane-Miles of Roadway Per 1,000 Jobs**
Montgomery County has 11.3 miles of roadway per 1,000 jobs, the next-to-smallest amount of any county in the state (Prince George's County ranks last with 10.3 lane-miles per 1,000 jobs). Somerset County leads the state with 166.4 lane-miles of roadway per 1,000 workers. ("Jobs" are defined as a filled employment position at a location within the county, whether or not the employee filling that position lives in that county).

24th **Rank Among Counties by Lane-Miles of *Local* Roadway Per 1,000 Jobs**
Montgomery County has the fewest lane-miles of local roadway per 1,000 jobs in the state: 9.0. Baltimore City is the next-lowest, with 9.7. Somerset County leads the state with 118.0 miles of local roadway for every 1,000 jobs located in that county.

24th **Rank Among Counties by Lane-Miles of Roadway Per 1,000 Registered Vehicles**
Montgomery County has the fewest lane-miles of roadway per 1,000 registered vehicles in the state: 12.7 lane-miles for every registered passenger vehicle. Garrett County has 144.3 lane-miles of roadway for every passenger vehicle registered in that county.

24th **Rank Among Counties by Lane-Miles of Roadway Per 1,000 Licensed Drivers**
Montgomery County has the fewest lane-miles of roadway per 1,000 licensed drivers in the state: 11.0. Somerset County has 117.2 lane-miles of roadway for every licensed driver living in that county.

16% **Percent of State's New Lane Mileage Built Each Year (Six Year Average)**
Montgomery County's share of all new lane-mileage built each year in Maryland averages 16 percent over the past 6 years, but although it was 25 percent in 1997 and 1998.

Taxation

Montgomery County generates between one-seventh and one-quarter of the locally-generated revenues for the state.

24% Share of State's Assessable Base

Montgomery County is home to 24 percent of the value of the state's real property, railroad operating property, utility operating property, and other business property, as measured by the assessable base. For the tax year beginning July 1, 1999, the total value of Montgomery County's assessable base was $32.1 billion out of a total of $136.7 billion for the state as a whole, according to the State Department of Assessments and Taxation.

25% Share of Net State Income Tax Revenues

Montgomery County contributes 24.7 percent of the state's income tax revenues. The state had net state personal and business income tax revenues of $3,590 million in FY1997, of which $887 million were contributed by individuals and firms located in Montgomery County.

15% Share of Montgomery County's Contribution to State Automotive Sales Tax Revenues

Montgomery County contributes 15.05 percent of the state's sales tax revenues in the "automotive" category, which includes taxes on sales of new and used vehicles, vehicle rental and repair, and sales of parts, supplies and fuel.

3rd **Rank Among Counties by Contribution of Automotive Sales Tax Revenues**
Montgomery County ranks third among counties in terms of the size of its contribution to state sales tax revenues in the automotive group. Montgomery contributed $19.4 million in 1996, following Baltimore County (which contributed $23.3 million) and Prince George's County ($21.9 million).

Population/Economy

Montgomery County's large contributions to state coffers arise from the fact that it is Maryland's most populous jurisdiction and its largest economic center.

16% **Share of State's Households**
With over 300,000 households, Montgomery County has 16 percent of the state's households, more than any other county in the state.

17% **Share of State's Population**
Montgomery County's population of 860,000 gives it 16.5 percent of the state's population.

1st **Rank Among Counties in Population**
Montgomery County has the largest population in the state, with 860,000 people. Second is Prince George's County with 790,250; Baltimore County with 727,200, and Baltimore City with 625,200.

17% **Share of State's Labor Force**
With a labor force of 500,171, Montgomery County has 17% of the state's labor force living within its borders.

1st **Rank Among Maryland Counties by Size of Labor Force**
Montgomery County has the state's largest labor force, followed by Prince George's County, Baltimore County, and Baltimore City.

19% **Share of State's At-Place Employment (Jobs)**
Montgomery County is home to 573,000 jobs, 19.1 percent of the all of the jobs located in the state.

1st **Rank Among Maryland Counties by Number of Jobs**
With 573,000 jobs, Montgomery County ranks first among Maryland counties in the number of jobs located within its borders. Baltimore City follows with 458,800 while Baltimore County ranks third (432,500) and Prince George's County fourth (408,700).

32% **Share of 1998 State Job Growth**
Montgomery County's 15,552 additional jobs in 1998 was 32 percent of the state's total of 48,500 new jobs.

1st **Rank Among Maryland Counties in Job Growth**
According to the State Department of Labor Licensing, and Regulation, Montgomery County had the largest job increase of any county in the state in 1998. Montgomery County added 15,552 jobs in 1998.

19% **Share of State's Job Growth (1995-2000)**
Montgomery County will add 49,000 new jobs between 1995 and 2000, according to the Maryland Office of Planning, which is 24 percent of the state's job growth during the same period.

28% **Share of Future (2000-2010) State Job Growth**
According to Maryland Office of Planning estimates, Montgomery County will add 91,200 jobs in between 2000 and 2010, which is 28 percent of the state's total projected job growth of 328,000 jobs during the period.

22% **Share of Total Wages Paid in the State**
As of the fourth quarter of 1998, Montgomery County's jobs accounted for $4,617,349,951 in wages, or 22 percent of the $21,173,708,792 paid by jobs located in the State of Maryland.

1st **Rank Among Maryland Counties in Wages**
On average, Montgomery County's jobs pay the highest wages in the state. The average salary for a Montgomery County job in 1997 was $37,310. In second place was Baltimore City with average salaries of $33,635. Prince George's County followed with average salaries of $32,436. (By the fourth quarter of 1998, the average wage for a Montgomery County job had risen to $43,628).

90% **Share of the State's Job in "High-Wage" Industries**
In 1997, Montgomery County had 91.6 percent of the state's jobs in industries that pay an average of over $50,000, according to analysis by the Regional Economic Studies Institute at Towson University.

33% **Share of the State's High-Technology Jobs**
Montgomery County has about one-third of the state's jobs in predominately high-technology industries such as telecommunications, information technology, aerospace, biotechnology, and high-tech manufacturing. Montgomery County has 35% of the state's biotechnology jobs, 38 percent of the state's information technology jobs, 35% of the state's jobs in electronics manufacturing and 25 percent of the state's jobs in instruments manufacturing.

Local Commitment

Almost one-quarter of all local public works expenditures in the state of Maryland were spent by Montgomery County, ranking it first among Maryland counties.

24% **Share of County Public Works Expenditures in the State**
Montgomery County spent $384.7 million on public works projects in 1996, or 23.5 percent of all county expenditures on public works projects in the state.

1st **Rank Among Counties for Expenditures on Public Works**
Montgomery County ranks first in the state in its local funding of public works projects (a category which includes transportation facilities but does not include facilities for the following: education, colleges, health, libraries or social services).

4th **Rank Among Counties for Public Works Expenditures as a Percentage of Total County Expenditures**
Montgomery County ranks fourth in the state for public works expenditures as a percent of total county expenditures. In 1996, Garrett County ranks highest with 22.8 percent of its total expenditures going toward public works, followed by St. Mary's County (18.8 percent), Baltimore City (18.0 percent) and Montgomery County (16.0 percent).

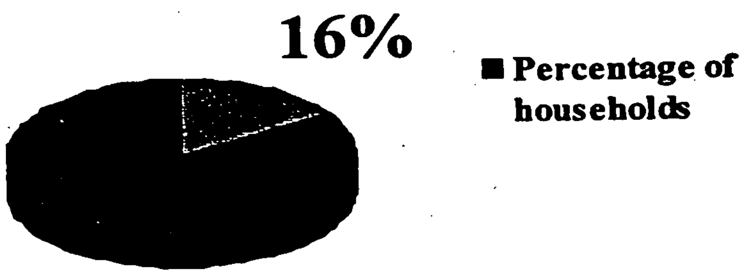
3rd **Rank Among Counties for Public Works Expenditures Per Capita**
Montgomery County ranks third in public works expenditures per capita, spending $587 per resident on public works in 1996. Baltimore City led the state with public works expenditures of $587 per resident, followed by Garrett County with per-resident public works expenditures of $463.

Attachments

Attached are graphs and charts providing additional data on the above indicators.

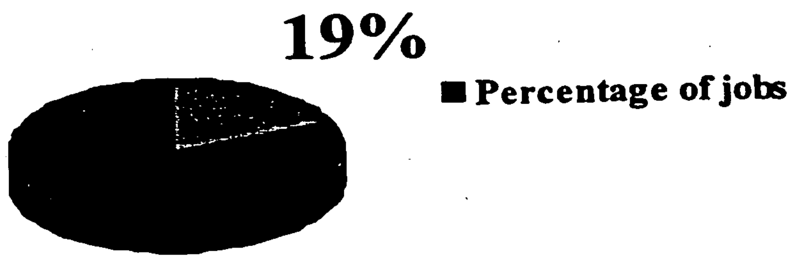
cc: Drew Dedrick

Montgomery County's Share of Maryland Households and Jobs are Largest in the State



Percentage of Households

With 299,275 households M.C. has the largest share in state

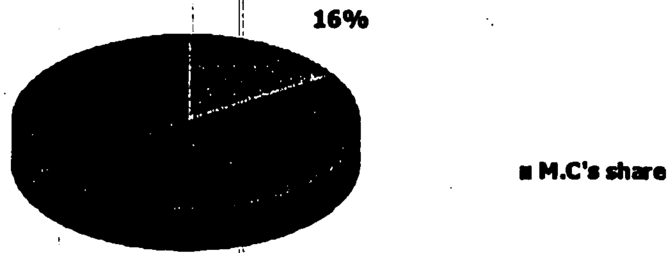


Percentage of Jobs

With 573,000 jobs M.C. has the largest share in state

Source: Maryland Office of Planing

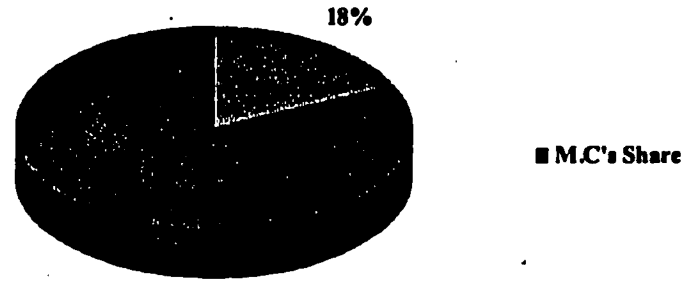
Montgomery County Has the Largest Share of Motor Vehicles Registered in Maryland



With 537,128 registered vehicles, Montgomery County has the the largest share of any county in the state.

Source: MDOT/MVA Vehicle Classification by Political Subdivision Tax-001 Statistical Report

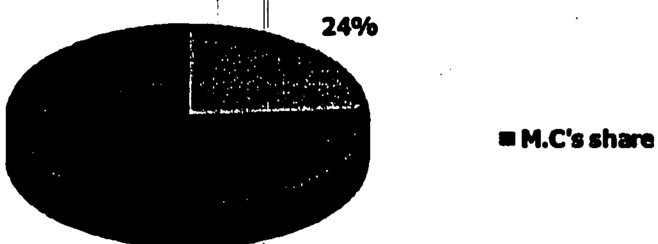
Montgomery County Has the Largest Share of Maryland's Licensed Drivers



With 623,186 licensed drivers, Montgomery County has the largest share in the state.

Source: M.V.A. as of July 1999

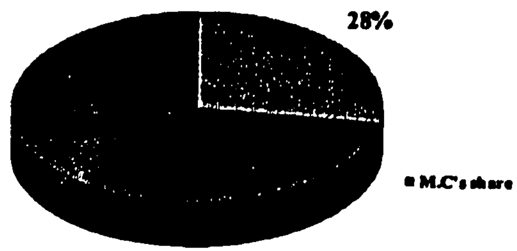
Montgomery County has the Largest Share of the Total State Assessable Base



Source: MD Department of Assessments and Taxation

Calculations include: Real Property Base, Local Personal Property, Operating Property Railroads, Public Utility Operating Improvements to Land, Public Utility Personal Property, Cable TV, and Corporate Personal Property.

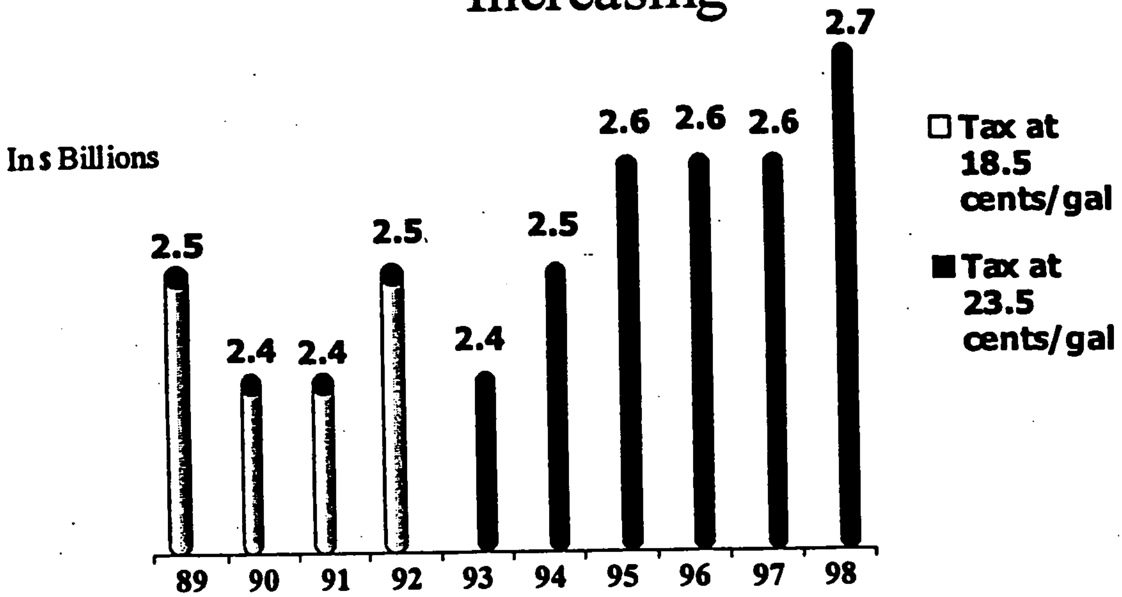
Montgomery County Will Provide 28% of State Job Growth in the Next Ten Years



Job Growth 2000-2010

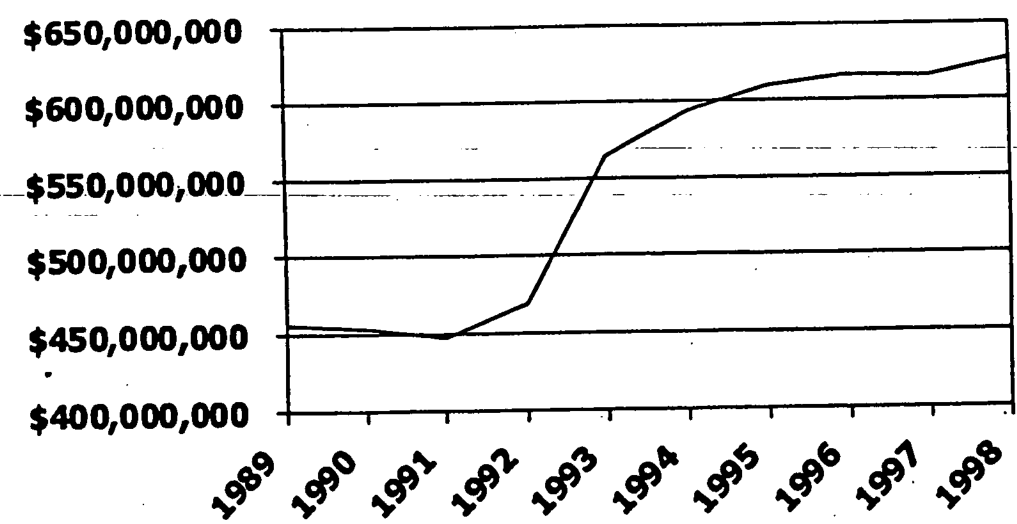
Source: Maryland Office of Planning

The Dollar Volume of Gasoline Sales is Increasing



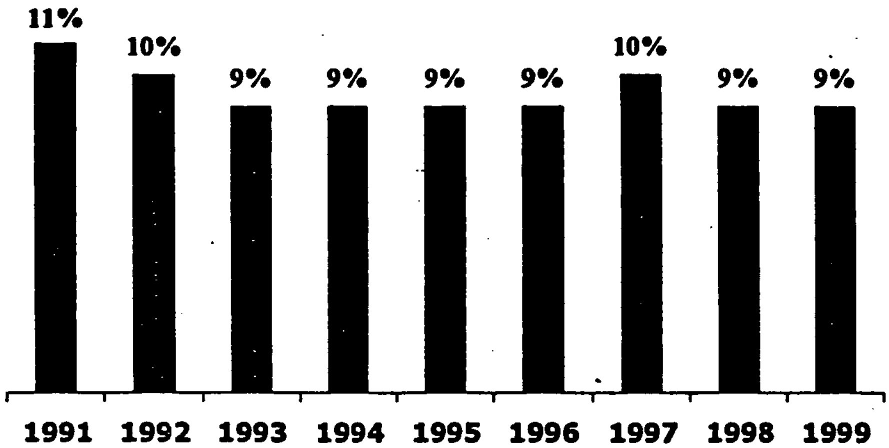
Source: Comptroller of the Treasury Bureau of Revenue estimates

Motor Fuel Tax Revenues are Relatively Flat Since 1995



Source: Comptroller of the Treasury Bureau of revenue estimates

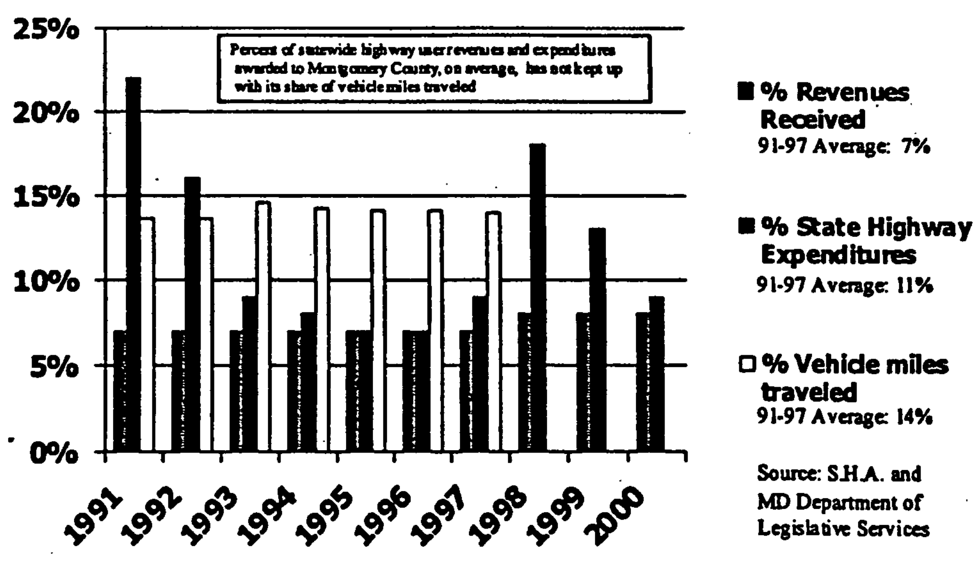
Montgomery County's Share of State Aid to Local Government has Decreased



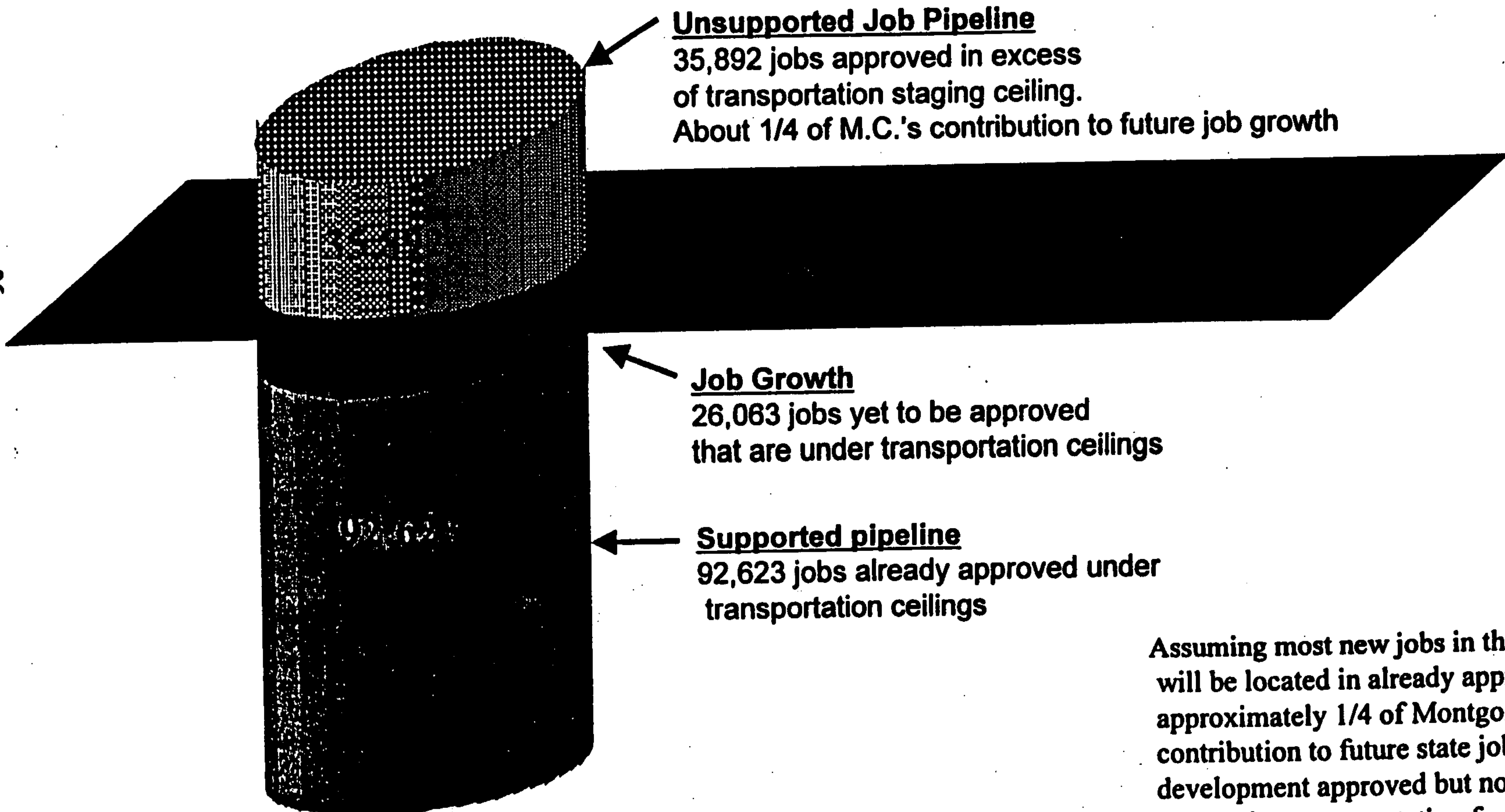
Note: Includes General Government, Community Colleges, Education, Libraries, Health, and Retirement.
General Government funds include the municipal share of police aid, highway user revenue and fire Aid

Source: Department of Legislative Services

State Funding of County Transportation Facilities Has not Kept Pace with Demand



Almost 36,000 Jobs in Approved Non-Development Are Not Supported by the County Transportation Network



Assuming most new jobs in the next ten years will be located in already approved development, approximately 1/4 of Montgomery County's contribution to future state job growth is in development approved but not supported by appropriate transportation facilities

Source: Maryland Office of Planing and
Montgomery County Department of Park and Planning